



STATEMENT OF BASIS
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 BAQ Air Permitting Division

Company Name:	SCE&G – Coit Combustion Turbine Facility	Permit Writer:	Kathleen T. Haddock, PE
Permit Number:	TV-1900-0132	Date:	DRAFT

DATE APPLICATION RECEIVED: November 29, 2016; revised application received December 4, 2017.

DATE OF LAST INSPECTION: November 2, 2017 – Comprehensive Inspection: No violations

FACILITY DESCRIPTION: This facility operates two combustion turbines for power generation that are operated only during periods of high electricity demand, i.e. peak shaving units. The facility operates two diesel-fired starter engines (SE3 and SE4), subject to 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ, and one diesel-fired emergency generator (ENG-1) subject to 40 CFR 63 Subpart ZZZZ, considered Insignificant Activities. The facility operates a distillate fuel oil storage tank, also considered an Insignificant Activity.

PROJECT DESCRIPTION: This project is for the renewal of the facility's Title V operating permit.

CHANGES SINCE LAST OP ISSUANCE: The current Title V was effective on October 1, 2012. A minor modification revision was issued on February 25, 2013, allowing the replacement of starter engines IA-SE1 and SE2 with IA-SE3 and SE4. Conditions were added to address 40 CFR 60, Subpart IIII and to add an operating limit of 500 hours per year. An administrative amendment revision was issued on January 30, 2014 to change the environmental contact.

Table 1: FACILITY WIDE EMISSIONS

Pollutant	Uncontrolled Emissions	Controlled/Limited Emissions
	TPY	TPY
PM/PM ₁₀ /PM _{2.5}	27.32	27.32
SO ₂	7.74	7.74
NO _x	2,004	2,004
CO	186.7	186.7
VOC	4.78	4.78
Pb	0.0319	0.0319
CO _{2e}	372,502	372,502
1,3 – Butadiene	0.036	0.036
Acetaldehyde	0.091	0.091
Acrolein	0.015	0.015
Arsenic	0.025	0.025
Benzene	0.13	0.13
Beryllium	0.00071	0.00071
Cadmium	0.011	0.011
Chromium	0.025	0.025
Ethylbenzene	0.073	0.073
Formaldehyde	1.6	1.6
Lead	0.032	0.032
Manganese	1.8	1.8
Mercury	0.0027	0.0027
Naphthalene	0.080	0.080
Nickel	0.010	0.010
POM	0.091	0.091



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Table 1: FACILITY WIDE EMISSIONS

Pollutant	Uncontrolled Emissions	Controlled/Limited Emissions
	TPY	TPY
Propylene Oxide	0.066	0.066
Selenium	0.057	0.057
Toluene	0.30	0.30
Xylenes	0.15	0.15
Total HAP	4.6	4.6

OPERATING PERMIT STATUS

This facility operates under Title V Operating Permit issued on July 3, 2012 with an effective of October 1, 2012. The permit expired on September 30, 2017. The facility submitted an application for renewal on November 29, 2016. In accordance with SC Regulation 61-62.70.5 (a)(1)(iii), the facility is granted an application shield.

The facility sent in a revision on December 4, 2017 to correct the rating and emissions for the two starter engines.

Table 2: REGULATORY APPLICABILITY REVIEW

Regulations	Comments/Periodic Monitoring Requirements		
Section II.E – Synthetic Minor	Not Applicable: The facility has not taken any synthetic minor limits.		
Standard No. 1	Not Applicable: The turbines are not fuel combustion sources as defined under this standard.		
Standard No. 3 (state only)	Not Applicable: The facility does not combust any waste.		
Standard No. 4	Applicable: The visible emissions limit of 40% opacity is applicable to the turbines. The turbines were installed in 1969 and have not been modified.		
Standard No. 5	Not Applicable: Although the facility was in existence pre-1979/1980, the facility does not have the PTE to emit VOC over 100 TPY and none of the subparts apply to the facility.		
Standard No. 5.2	Not Applicable: The turbines were installed prior to the applicability date of June 25, 2004 and none of the burner assemblies have been replaced. The standard condition pertaining to pre-2004 burner assemblies is included in the renewal. The emergency generator is exempt from the standard in accordance with Section I (B)(2). The starter engines are exempt in accordance with Section I (B)(13), as they are operated less than 100 hours per year. (Annual emissions calculations provided in the renewal application for the starter engines were based on 100 hours per year.)		
Standard No. 7	Not Applicable: The facility is a major source for NO _x and CO but has not undergone any major modifications that have triggered PSD applicability.		
61-62.6	Applicable: The facility is subject to the state-wide requirements for fugitive particulate matter emissions as stated in condition M.4 in the General Facility Wide section of the permit.		
40 CFR 60 and 61-62.60	Subpart	Emission Unit(s)	Applicability Determination

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Regulations	Comments/Periodic Monitoring Requirements		
	Kb - Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	IA-ST-1	Not Applicable in accordance with §60.110b(b). The volume of the tank is 500,000 gallons (1893 m ³) but the material stored (distillate fuel oil) has a vapor pressure of less than 3.5 kPa.
	GG – Stationary Gas Turbines	CT1 and 2	Not Applicable in accordance with §60.330(b). The rated heat input of each turbine is greater than the 10 MMBtu/hr applicability threshold, but the turbines were installed prior to October 3, 1977 (1969) and have not been modified or reconstructed.
	III – Stationary Compression Ignition IC Engines	CT1 and 2	Not applicable by definition
	III – Stationary Compression Ignition IC Engines	SE3 and SE4	Applicable in accordance with §60.4200(a).
	III – Stationary Compression Ignition IC Engines	ENG-1	Not applicable in accordance with §60.4200 (a) as the emergency generator was installed in 1969 and has not been modified.
	III – Stationary Spark Ignition IC Engines	NA	The facility does not operate any spark ignition IC engines.
	KKKK – Stationary Combustion Turbines	CT1 and 2	Not Applicable in accordance with §§60.4300 and 60.4305. Although the two combustion turbines are rated at greater than 10 MMBtu/hr, they were installed prior to February 18, 2005 and have not been modified or reconstructed.



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Regulations	Comments/Periodic Monitoring Requirements		
40 CFR 61 and 61-62.61	Not Applicable: The facility does not operate any of the processes regulated.		
40 CFR 63 and 61-62.63	Subpart	Emission Unit(s)	Applicability Determination
	YYYY – Stationary Combustion Turbines	CT1 and 2	Not Applicable in accordance with §63.6085 as the facility is not a major source of HAP.
	ZZZZ – Stationary RICE	SE3, SE4, and ENG-1	Applicable to SE3, SE4, and ENG-1 in accordance with §63.6585(c). The facility will demonstrate compliance with the MACT for SE3 and SE4 by demonstrating compliance with 40 CFR 60, Subpart IIII as allowed in §63.6590 (c)(1). As ENG-1 is considered an existing source (and not subject to the NSPS), the facility must demonstrate compliance with the applicable requirements of ZZZZ.
61-62.68	Not Applicable: The facility stores only diesel fuel (Tank ST-1) which is not a regulated pollutant under 112(r).		
40 CFR 64 (CAM)	Not Applicable: The facility does not operate any control devices.		
61-62.96 and 40 CFR 96	Not Applicable: The NO _x and SO ₂ Budget Trading Program is not applicable to the facility. Although the facility operates two combustion turbines and produces electricity for sale, the turbines serve a generator with a capacity of less than 25 MWe. In accordance with §§96.4(a) and 96.204(a)(1), the regulation is not applicable.		
61-62.99	Not Applicable: The NO _x Budget Program Requirements for Stationary Sources not in the Trading Program is not applicable as the facility does not operate a kiln.		

AMBIENT AIR STANDARDS REVIEW

Regulations	Comments/Periodic Monitoring Requirements
Standard No. 2	Applicable: Applicable: See modeling summary dated December 30, 2013. There have been no changes to the facility requiring updated modeling.
Standard No. 7.c	Not Applicable: MSBDs have not been established for Fairfield County.



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AMBIENT AIR STANDARDS REVIEW	
Regulations	Comments/Periodic Monitoring Requirements
Standard No. 8 (state only)	Not Applicable: In accordance with Section I of the standard, modeling of TAP from the burning of virgin fuel is not required.

PUBLIC NOTICE

This Title V Permit will undergo a 30-day public notice period and a 45-day EPA comment period in accordance with SC Regulation 61-62.1, Section II.N and SC Regulation 61-62.70.7(h). The comment period was open from June 7, 2018 to July 6, 2018 and was placed on the BAQ website during that time period.

SUMMARY AND CONCLUSIONS

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.